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CKRWP Proposed Source Solutions and System Upgrades

The Cedar Knox Rural Water Project (CKRWP) draws surface water from Lewis and Clark Lake to serve the communities of Crofton, Fordyce, St. Helena, and Obert; more than 900 rural connections; several sanitary improvement districts (SIDs); recreational areas; and businesses along Lewis and Clark Lake and the Missouri River.

There have been many challenges in relation to utilizing surface water to meet drinking water needs on a relatively small scale. Treating surface water is costly due to the likely occurrence of micro and macroorganisms, algae, and pathogens, which require filtration and chlorination at minimum. In 2017, CKRWP was issued an Administrative Order (AO) by the Nebraska Department of Environment and Energy (NDEE) for exceeding the maximum contaminant level (MCL) for the disinfection byproduct Total Trihalomethane (TTHM). The AO must be resolved with a permanent solution that addresses TTHM production.

Additionally, CKRWP faces encroaching sediment in Lewis and Clark Lake which threatens the viability of the intake structure and the ability to draw water to meet long term needs. It is estimated the sediment will cover the intake structure within 20 years. The proximity of the sediment to the intake structure also results in higher levels of organic matter suspended in the water that must be removed through treatment and disinfection which results in increased levels of TTHM production.

The CKRWP Advisory Committee, which directs operations of CKRWP, began investigating solutions to the encroaching sediment and related issues in 2016. With assistance from Bartlett and West Engineering, multiple options to meet current and future needs have been considered. Ultimately the CKRWP Advisory Committee and the Lewis and Clark NRD Board of Directors decided that conversion to a groundwater source is the best long-term sustainable solution for CKRWP. Groundwater was considered as an alternative due to the high costs associated with other options. The

Advisory Committee

Chuck Sudbeck - Chair Joe Janssen

Martin Kleinschmit

Dan Kollars

Francis Steffen

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Terry Zavadil

CKRWP STAFF

~Manager~ Scott Fiedler

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~Field/Plant Technician~ Vince Lammers

~Program Assistant~ Sue Sudbeck

best potential source was identified southwest of Crofton and is commonly referred to as the Dolphin Township sites.

Partial funding has been secured from the American Rescue Plan Act (ARPA) and through the NDEE State Revolving Fund (SRF) with work to begin this fall and winter. The initial phase of the CKRWP source project is to install test wells at the two (2) identified sites and to conduct pumping and water quality tests of those wells. Test pumping is performed to assess aquifer properties, determine final production well designs, and define optimum pumping rates and schedules. These tests include monitoring of water levels in constructed observation wells and in existing irrigation, domestic and stock wells to monitor potential changes in water levels caused by pumping the test wells. The results of the long-term tests will allow for protection of both the CKRWP supply and existing groundwater users. Quality tests are measuring to determine treatment needs.

The Cedar Knox Rural Water Project strives to provide quality drinking water and looks forward to serving the need of rural residents and customers long into the future. If you have questions, contact CKRWP at 402-254-6758.

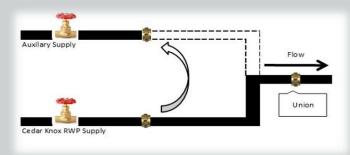
Prevent Backflow:

Can you imagine drinking water that came from a swimming pool, hot tub, or stock tank?

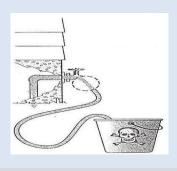


It can happen when a pool, hot tub or tank is filled with a hose and the hose end is below water level. All it takes is a drop in water pressure (such as a waterline break). Chemical handheld sprayers attached to a hose is another way to contaminate drinking water. Any time a water outlet, whether it is a garden hose or a permanent plumbing installation, is under water - even slightly - backflow or back siphonage can occur. It is very important to prevent cross connections with backflow prevention assemblies.

With the dry conditions this year, some people may have switched from well water to rural water, or vise-versa. As a reminder, there should be no physical connection between the two systems unless protected by a suitable backflow device approved by the State Health Department. An annual written certification of testing, by a state licensed backflow prevention device tester, of any backflow device having test ports is required by NDEE regulations. Failure to comply with requirements may result in disconnection of water service.



CKRWP recommends installing a hose bib vacuum breaker to all hydrants and faucets where a hose can be attached. There are approved freeze-proof hose bib vacuum-breakers available at the office for \$8.00 plus tax.



Demand Charges

Cedar Knox Rural Water Project Advisory Committee implemented the Demand Charge policy in early 2022 to address usage that exceeds allocated Benefit Units per water service connection.

The Demand Charge is applied when the Benefit Unit (BU) has been exceeded. A single BU allows up to 27,000 gallons per month. When exceeding a BU, the rate per 1000 gallons used goes up as the usage increases.

Customers can avoid the Demand Charge by purchasing additional Benefit Units as their needs require. Request for Additional Benefit Units are subject to engineering and advisory committee approval.

Galen Jueden Memorial Scholarship



The CKRWP Advisory Committee and Staff are pleased to announce Carson Sudbeck as the recipient of the \$500 Galen Jueden Memorial Scholarship. Carson is the son of Sue Sudbeck and Russ Sudbeck and a 2022 graduate of Hartington Newcastle Public School. Carson will be studying Automotive Technology at Northeast Community College this fall.

Congratulations Carson and Best of Luck at Northeast Community College.

Water Service and Customer Responsibility:

Customer responsibility begins immediately after the CKRWP water service meter pit. The meter pit, water meter, MIU and MIU board are all the property of CKRWP. Any damage to CKRWP's water service equipment other than normal wear and tear and weathering is the customer's responsibility.

Shutting Water Off and Curb Stops:

The water shut off in the meter pit is not designed for frequent use. CKRWP highly recommends all customers install a curb stop on their private lines just after the meter. A curb stop gives customers easy access to turn the water on and off on a regular basis or in emergency situations. A curb stop is a water control valve located on the private water line beside the water meter pit. Its purpose is to facilitate the isolation of water supply to the customer.

Please call if you need water shut off in the pit. The shut off valve in the pit should ONLY be shut off by CKRWP employees.

